

chain nodes :

7 8 9 10 11 16 17 18 19 20 21 22 23 24 25 26 27 28 29 32

ring nodes :

1 2 3 4 5 6

chain bonds :

1-32 2-7 3-17 4-9 5-16 6-8 7-18 8-19 9-10 10-11 18-20 19-21 20-22 21-23
22-24 23-27 24-25 25-26 27-28 28-29

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

2-7 4-9 6-8 9-10 20-22 21-23 22-24 23-27 24-25 25-26 27-28 28-29

exact bonds :

1-32 3-17 5-16 7-18 8-19 10-11 18-20 19-21

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

G1:CH,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:Atom 23:Atom
24:CLASS 25:CLASS 26:Atom 27:CLASS 28:CLASS 29:Atom 32:CLASS

=> d his

(FILE 'HOME' ENTERED AT 08:41:37 ON 18 JUN 2003)

FILE 'REGISTRY' ENTERED AT 08:42:47 ON 18 JUN 2003

L1 STRUCTURE UPLOADED
L2 1 S L1
L3 2 S L1 FULL

FILE 'CAPLUS' ENTERED AT 08:43:35 ON 18 JUN 2003

L4 2 S L3

=> d que 14 stat

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L3 2 SEA FILE=REGISTRY SSS FUL L1
L4 2 SEA FILE=CAPLUS ABB=ON PLU=ON L3

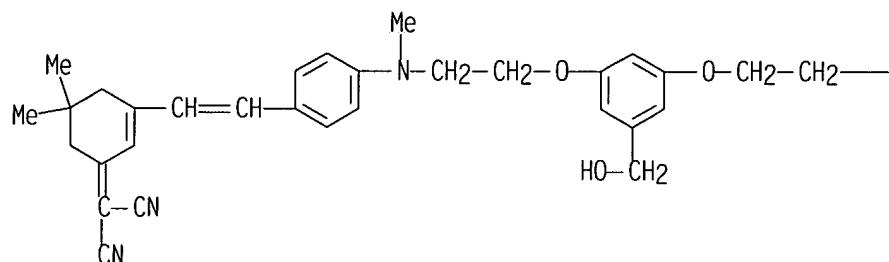
=> d 1-2 ibib iabs hitstr

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2003:211133 CAPLUS
 TITLE: Nonlinear optical polyimide containing hyperbranched chromophores as a side chain
 AUTHOR(S): Do, Jung Yun; Park, Seung Koo; Park, Suntak; Ju, Jung-Jin; Lee, Myung-Hyun
 CORPORATE SOURCE: Basic Research Laboratory, Electronics and Telecommunications Research Institute, Deajon, 305-350, S. Korea
 SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2003), 44(1), 821-822
 CODEN: ACPAY; ISSN: 0032-3934
 PUBLISHER: American Chemical Society, Division of Polymer Chemistry
 DOCUMENT TYPE: Journal; (computer optical disk)
 LANGUAGE: English

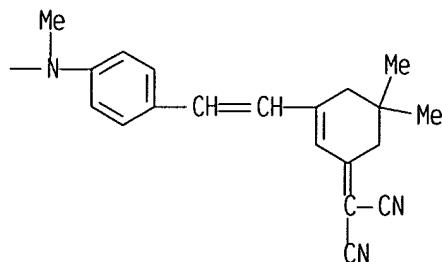
ABSTRACT:
 Hyperbranched structures of chromophores were developed and incorporated into a polyimide with various chromophore concn. The resulting polymers provided higher electro-optic coeffs. than conventional side chain optical polymers due to enhanced poling efficiency.

IT 531512-22-8DP, reaction product with poly(hydroxy-imide)
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (nonlinear optical polyimide contg. hyperbranched chromophores as a side chain)
 RN 531512-22-8 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



PAGE 1-B



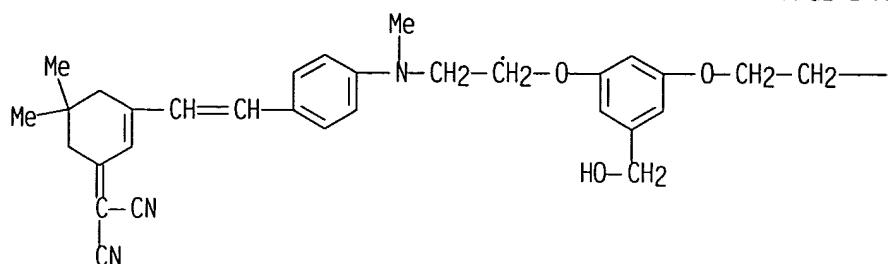
IT 531512-22-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)(nonlinear optical polyimide contg. hyperbranched chromophores as a
side chain)

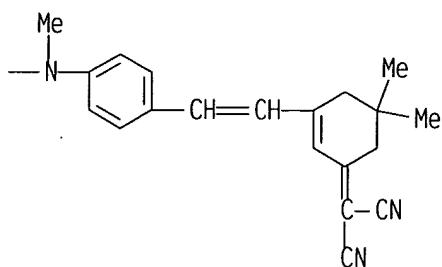
RN 531512-22-8 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



PAGE 1-B



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:36379 CAPLUS
 DOCUMENT NUMBER: 133:89901
 TITLE: Model dendrons and dendrimers incorporating diphenylamino-substituted diphenylpolyene and PPV-oligomer moieties for NLO applications
 AUTHOR(S): Ashworth, Kimba; Spangler, Charles W.; Reeves, Benjamin
 CORPORATE SOURCE: Dep. Chem. Biochem., Montana State Univ., Bozeman, MT, USA
 SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1999), 3796(Organic Nonlinear Optical Materials), 170-177
 CODEN: PSISDG; ISSN: 0277-786X
 PUBLISHER: SPIE-The International Society for Optical Engineering
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ABSTRACT:
 The synthesis and characterization are described of diphenylamino-substituted diphenylpolyene and poly(p-phenylenevinylene)s as two-photon absorbers, photoluminescent materials suitable for org. light-emitting diodes, and as dendrimers capable of 3D charge delocalization and exceptionally large third order hyperpolarizability. Bis-(diphenylamino)diphenylpolyenes form exceptionally stable, highly absorbing bipolaronic dications in soln. and thin film. Replacement of one diphenylamino substituent with a N-(hydroxyethyl), N-ethylaminophenyl moiety yields a polyene that also forms stable bipolarons which are intensely fluorescent. These chromophores are easily attached to either a PMMA backbone or to 3,5-dihydroxybenzyl alc. to yield functionalized dendrons capable of attachment to various core mols. Diphenylamino-substituted PPV oligomers can also be obtained with similar functionality. These materials possess large two-photon cross-sections and display optical limiting for nanosecond pulses with peak activity extending into the visible portion of the spectrum.

IT 281655-29-6P

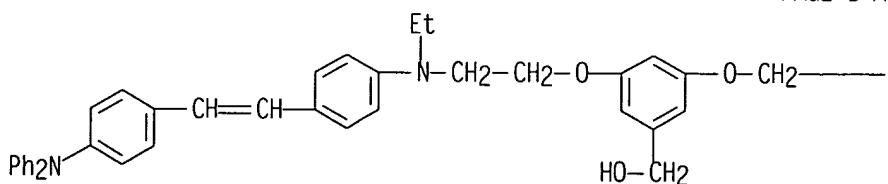
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);
 RACT (Reactant or reagent)

(convergent dendron; prepn. of model dendrons and dendrimers incorporating diphenylamino-diphenylpolyene and PPV-oligomer and luminescence and hyperpolarizability of compds. for NLO applications)

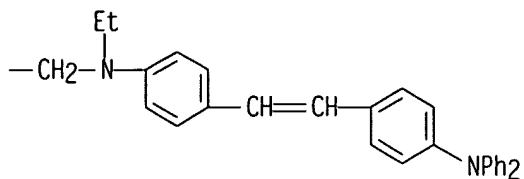
RN 281655-29-6 CAPLUS

CN Benzenemethanol, 3,5-bis[2-[[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]ethylamino]ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	9.49	158.06
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.30	-1.30

STN INTERNATIONAL LOGOFF AT 08:44:25 ON 18 JUN 2003